



# **Section B:1**

## ***Waste Management***

### **PROJECT MANAGERS**

G.H. Sanders, RL  
(509) 376-6888

T.L. Moore, DFSH  
(509) 372-8124

## **SUMMARY**

Waste Management (WM) consists of the Solid Waste Storage and Disposal, Project Baseline Summary (PBS) WM03, Work Breakdown Structure (WBS) 1.2.1; Solid Waste Treatment, PBS WM04, WBS 1.2.2; Liquid Effluents - 200 Area, PBS WM05, WBS 1.2.3.1; and the Waste Encapsulation and Storage Facility, PBS TP02, WBS 1.4.2.

PBS WM05 is divided between WBS 1.2.3.1, Liquid Effluents (200 LEF) and WBS 1.2.3.2, 310 TEDF/340 Facility (300 LEF). The 310 TEDF/340 Facility work scope is included in the River Corridor Project, whereas the Liquid Effluents (200 LEF) work scope remains in Waste Management. For the purpose of performance analysis, PBS WM05 is reported in its entirety in the WM Project, which has the majority of the work scope and funding.

Fiscal-year-to-date milestone performance (EA, DOE-HQ, RL) shows all four milestones completed early.

NOTE: Unless otherwise noted, the Safety, Conduct of Operations, Milestone Achievement, and Cost/Schedule data contained herein is as of August 31, 2001. Other data is updated as noted.

## **NOTABLE ACCOMPLISHMENTS**

**Accelerate Readiness to Receive Spent Nuclear Fuel (SNF) K Basin Sludge** - Both PUREX towers were removed from the T Plant canyon as of September 25, 2001. Final preparations were made for the RL Operational Readiness Review (ORR) to commence October 1, 2001.

**Mixed Low Level Waste (MLLW) Treatment** - Three additional shipments of debris waste (67 cubic meters [ $\text{m}^3$ ]) were completed to Allied Technology Group (ATG) for macro-encapsulation. Treatment should be completed early next fiscal year. Seven hundred  $\text{m}^3$  of MLLW is forecasted to be treated at the end of the fiscal year.

**Transuranic (TRU) Production** - The TRU Program completed the seventh and final Fiscal Year (FY) 2001 shipment to the Waste Isolation Pilot Plant (WIPP) on August 23, 2001. A total of 58.8  $\text{m}^3$  (294 drums) were shipped to WIPP. A total of 64.4  $\text{m}^3$  (322 drums) of waste were certified this fiscal year.

**Nuclear Materials Stabilization (NMS) Project Support** - Shipments of Hanford ash resumed on September 19, 2001. A total of 40 Hanford Ash Pipe Overpack Containers (POCs) had been received through September 27, 2001. The POC Safety Analysis Report for Packaging (SARP) Engineering Change Notice for Plutonium/Aluminum (Pu/Al) alloys was approved by RL on September 19, 2001. The initial shipment of Pu/Al alloys to the Central Waste Complex (CWC) was completed on September 20, 2001.

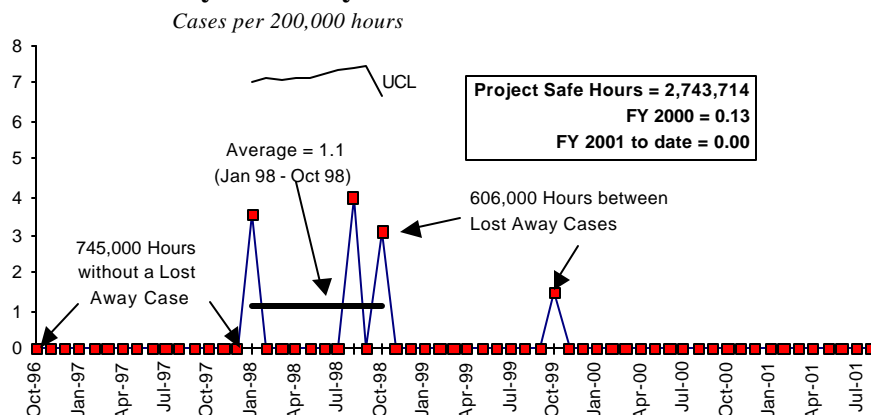
**Support to River Corridor Project (RCP)** - Transport and disposal of Remote-Handled-Low Level Waste Hittman liners from the 324 D-Cell was completed in September. Characterization was completed on the two 300 area water towers, which were then received at the Low-Level Burial Ground (LLBG). The last of the 303K demolition project bulk loads was received at the LLBG on September 26, 2001.

**Liquid Waste Processing** - From October 1, 2000, through September 23, 2001, 27 million gallons of wastewater were processed through the 200 Area Effluent Treatment Facility (ETF) supporting the Environmental Restoration Contractor 200-UP-1 Groundwater. The Liquid Effluent Retention Facility has received over 155,000 gallons of wastewater through the ETF load-in facility via tankers.

## SAFETY

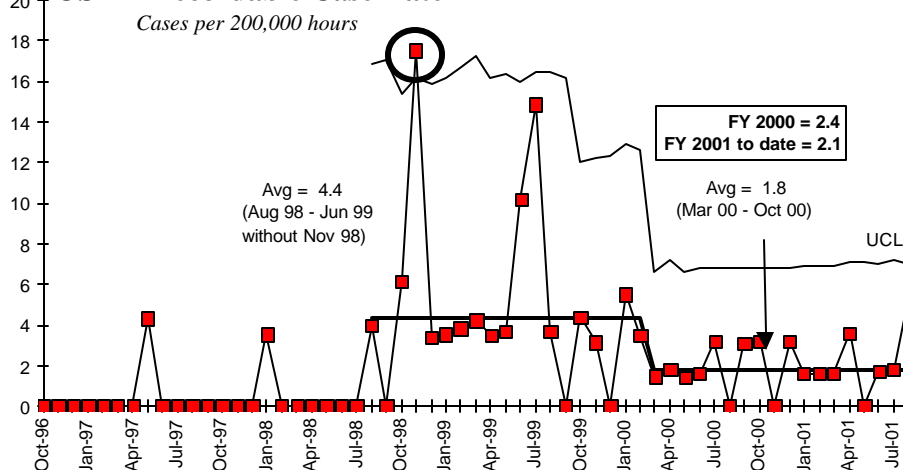
Through August, the Waste Management Project (WMP) has achieved over 2.7 million hours without a Lost Away Workday injury. During August, there were two Restricted Workday Cases and one OSHA Recordable Case reported.

### Lost Away Workday Case Rate



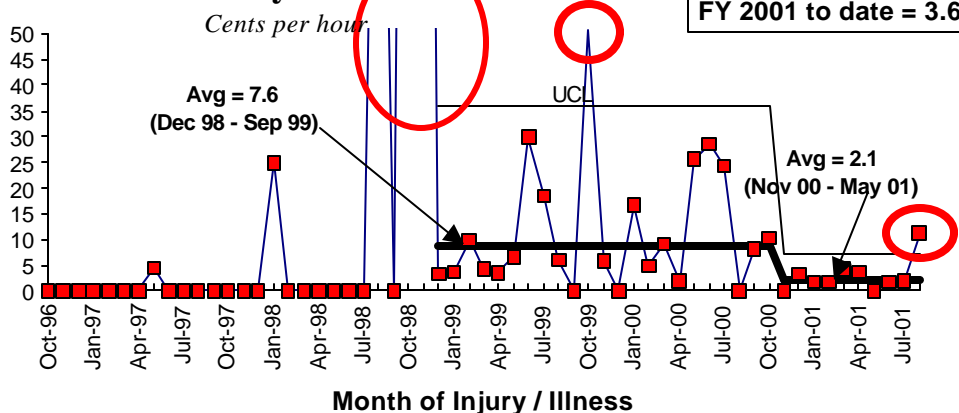
Green

### OSHA Recordable Case Rate



Green

### DOE Safety Cost Index



Yellow

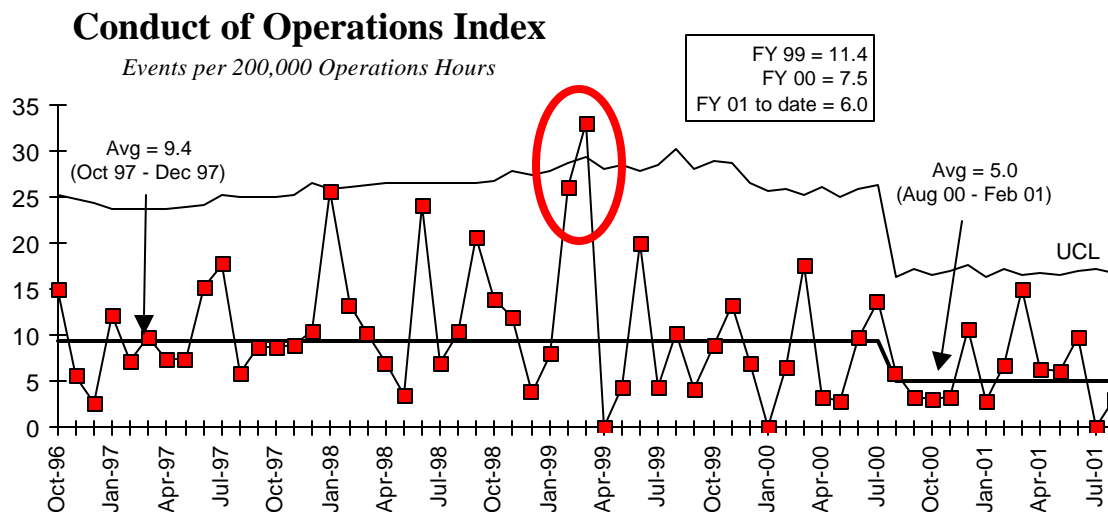
## ISMS Status

Green

Two members of the Voluntary Protection Program (VPP) Steering Committee attended the national VPP Participants Association conference August 27-30, 2001, to obtain information and ideas about VPP implementation strategies being used across the DOE complex, as well as in commercial industry. WMP VPP activity continues with an internal assessment of employee VPP awareness scheduled for October and November.

## CONDUCT OF OPERATIONS

Green



## BREAKTHROUGHS / OPPORTUNITIES FOR IMPROVEMENT

### Breakthroughs

Green

WMP is supporting the Spent Nuclear Fuel Project's Accelerated Closure Team (ACT) efforts to reduce fuel removal processing times and accelerate the completion of the project. Specific initiatives being supported include development of an Accelerated Sludge Capture and Removal Strategy and determination of the thermal stability of alternate "wet" sludge storage alternatives.

### Opportunities for Improvement

WMP is experiencing an upward trend in its number of Recordable injuries. Analysis indicates that many of the injuries this quarter, as well as throughout the year, might have been prevented had there been an increased sense of "personal awareness" of the environment or activity at the time of the injury. With enhanced employee involvement and communications through the Project Employee Zero Accident Council (EZAC) as well as all Facility EZACs, increased "personal awareness" will be stressed as one avenue for improvement relative to the employee injury rate.

## UPCOMING ACTIVITIES

**Land Disposal Restrictions (LDR) Report** - The Washington State Department of Ecology (Ecology) extended its comment period on the Report under the Tri-Party Agreement by 45 days; comments are now expected in late September. A lengthy Ecology LDR audit is currently underway, projected to last into October 2001. T Plant's audit has been completed and a CWC audit is tentatively scheduled for September 27, 2001.

**Accelerate Readiness to Receive SNF K Basin Sludge** - 1) Complete RL ORR for Shippingport (PA) fuel, 2) Complete major crane outage, 3) Initiate Shippingport fuel movement, and 4) Accelerate T Plant Canyon cell cleanout.

**Waste Encapsulation and Storage Facility (WESF) Operations** - Begin annual inner-capsule movement testing and capsule etching in October 2001. Prepare for DNFSB 2000-2 Phase II assessment of Confinement Ventilation Systems scheduled for December 2001.

**MLLW Treatment** - Prepare additional debris waste for shipment to ATG early next fiscal year.

**Nuclear Materials Stabilization (NMS) Project Support** - Continue to receive waste in support of Hanford ash processing through November 2001.

**TRU Waste Retrieval** - Continue technical planning to support buried drum retrieval start-up by April 2002.

**TRU Recertification and PFP Audits** - Complete corrective actions associated with the (Plutonium Finishing Plant and Re-Certification) WIPP audits.

**Support to RCP** - Support the removal of a Curium/Americium source from the 327 Facility. Support characterization, transport and storage of 324 pipe pit Remote-Handled (RH) wastes.

**Liquid Waste Processing** - Continue groundwater processing at the 200 Area ETF.

## MILESTONE ACHIEVEMENT

MILESTONE TYPE	FISCAL YEAR-TO-DATE				REMAINING SCHEDULED			TOTAL FY 2001
	Completed Early	Completed On Schedule	Completed Late	Overdue	Forecast Early	Forecast On Schedule	Forecast Late	
Enforceable Agreement	4	0	0	0	0	0	0	4
DOE-HQ	0	0	0	0	0	0	0	0
FO	0	0	0	0	0	0	0	0
RL	0	0	0	0	0	0	0	0
<b>Total Project</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>

Only TPA/EA milestones and all FY 2001 overdue and forecast late milestones are addressed in this report. Milestones overdue are deleted from the Milestone Exception Report once they are completed. The following chart summarizes the FY 2001 TPA/EA milestone achievement and a Milestone Exception Report follows. The last milestone table summarizes the first six months of FY 2002 TPA/EA milestones.

FY2001 Tri-Party Agreement / EA Milestones			
Number	Milestone Title	Status	
M-91-13 (A1C-01-001)	Initiate Disposal of CH-LLWM	Due 06/30/01 – Completed September 15, 1999	Green
M-91-18 (WMP-01-001)	Transmit T Plant Sludge Storage Conceptual Design to Ecology	Due 06/29/01 – Completed June 11, 2001	Green
M-26-01K	Annual Hanford LDR Report	Due 06/30/01 – Completed June 28, 2001	Green
M-26-05H (WMH-00-006)	Prep Biennial Tritium Treatment Technology Evaluation report	Due 08/31/01 – Completed July 25, 2001, with RL transmittal to Ecology and Environmental Protection Agency (EPA). FH transmitted the report to RL on July 13, 2001.	Green
DNFSB Commitments			
	None.		

## MILESTONE EXCEPTION REPORT

<u>Number/WBS</u>	<u>Level</u>	<u>Milestone Title</u>	<u>Baseline Date</u>	<u>Forecast Date</u>
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Overdue – 0

FY 1999 Overdue – 1

TRP-98-709	RL	Complete Hot Cell Deactivation	03/31/99	09/30/01
1.4.2		WESF Facility (A-E)		

**Cause:** This milestone is not complete due to not being supported at the current funding level.

**Impact:** No overall impact is expected.

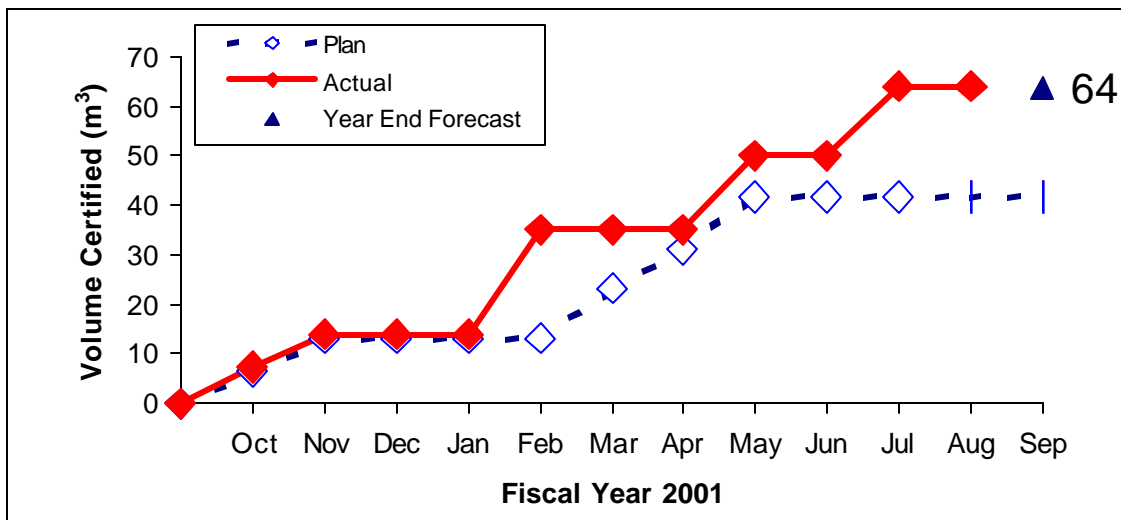
**Corrective Action:** Funding for this work scope [Return-on-Investment (ROI)] has been identified and a new forecasted completion date of September 30, 2001 established.

FY 2002 Tri-Party Agreement / EA Milestones		
Number	Milestone Title	Status
	Nothing to report at this time.	
DNFSB Commitments		
	Nothing to report at this time.	

## PERFORMANCE OBJECTIVES

### CERTIFY TRU WASTE

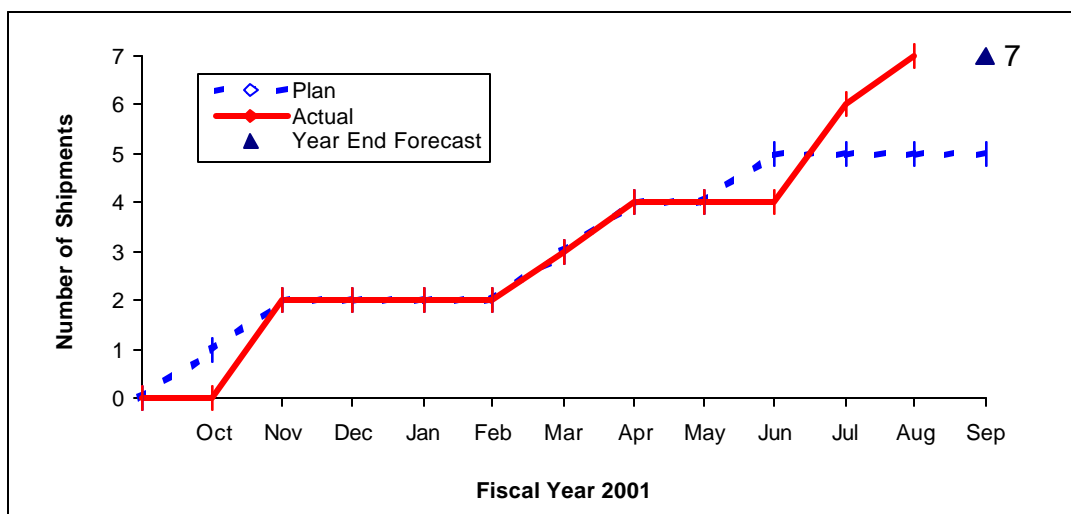
Green



Ahead of schedule (64 m<sup>3</sup> certified).

### SHIP TRU WASTE

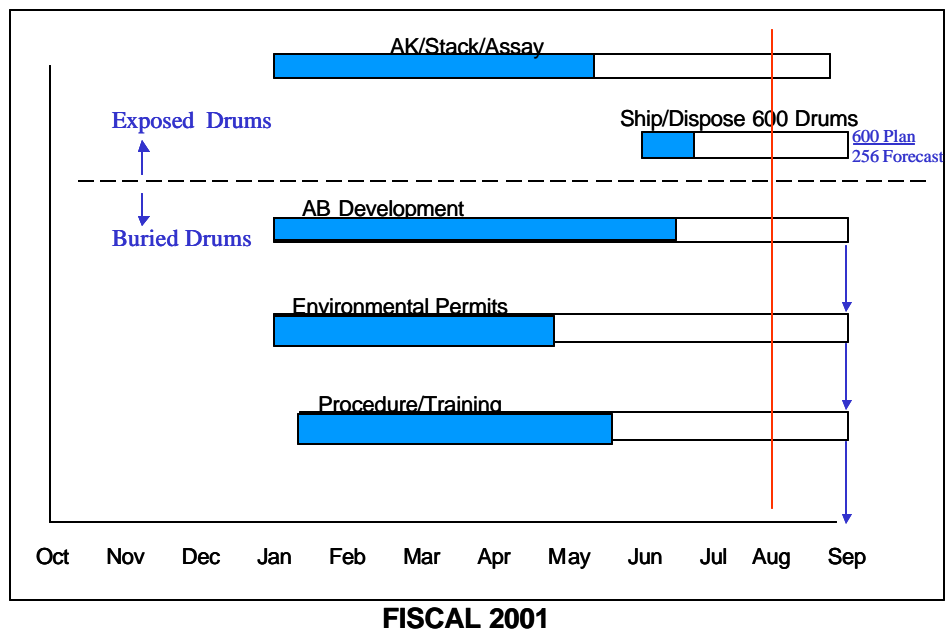
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Ahead of schedule.

## RETRIEVE TRU WASTE

Yellow

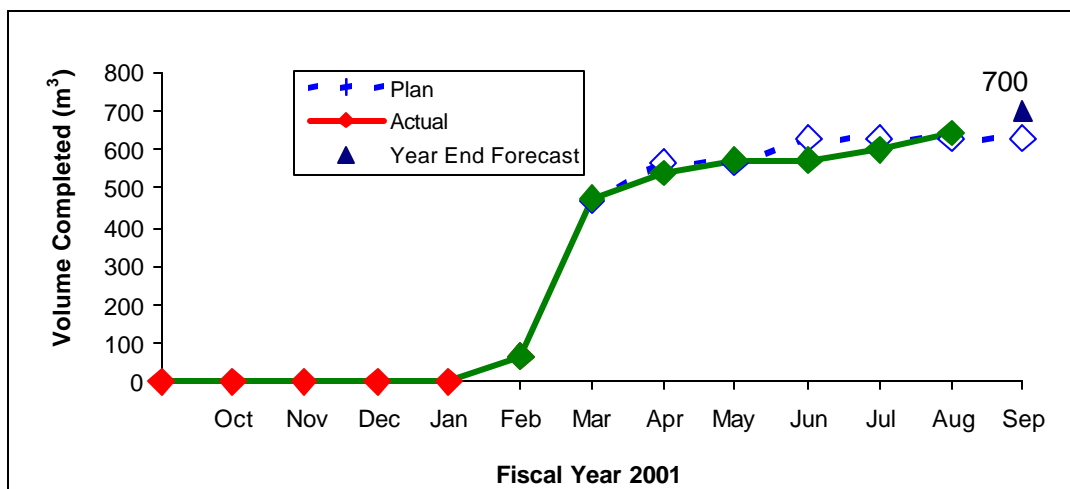


Behind schedule.

- Retrieved 256 drums through September 26, 2001.
- Continue planning buried drum start-up by April 2002.

## TREAT AND DISPOSE MLLW

Green

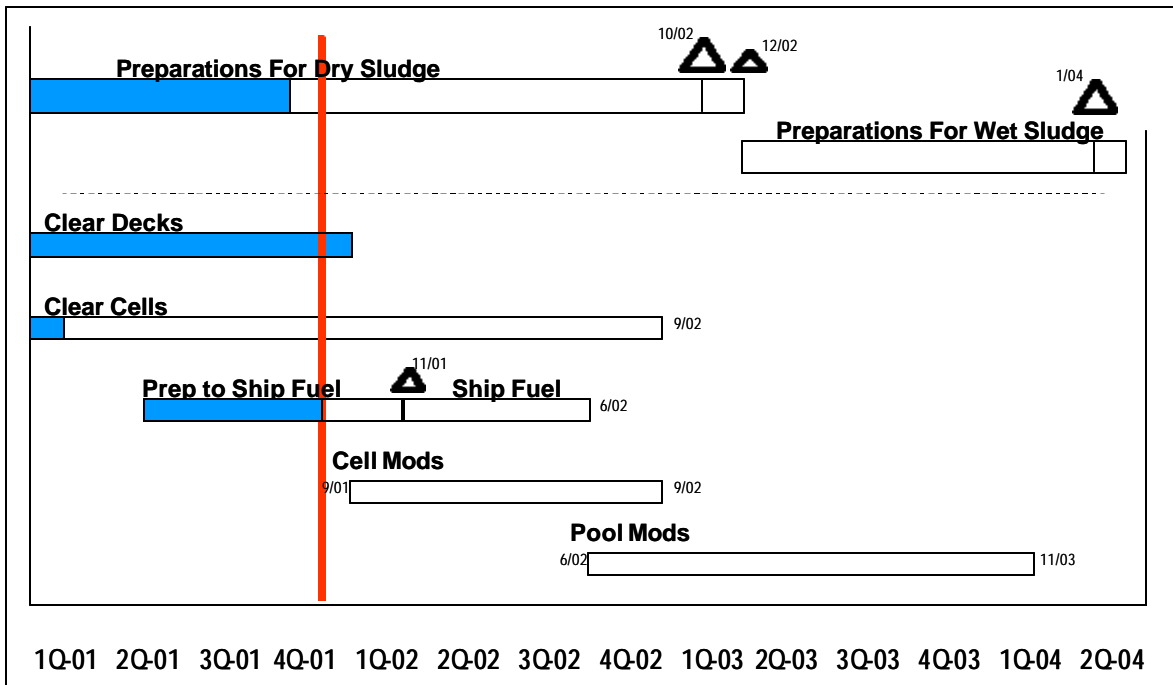


Ahead of schedule.



## ACCELERATE READINESS TO RECEIVE K-BASIN SLUDGE

Green



## FY 2001 SCHEDULE / COST PERFORMANCE – ALL FUND TYPES CUMULATIVE TO DATE STATUS – (\$000)

Green

		FYTD									
	By PBS	BCWS	BCWP	ACWP	SV	%	CV	%	BAC	EAC	
PBS WM03 WBS 1.2.1	Solid Waste Storage & Disposal	\$ 26,827	\$ 26,645	\$ 22,315	\$ (183)	-1%	\$ 4,330	16%	\$ 29,655	\$ 25,393	
PBS WM04 WBS 1.2.2	Solid Waste Treatment	\$ 38,724	\$ 38,095	\$ 37,538	\$ (629)	-2%	\$ 557	1%	\$ 43,288	\$ 43,152	
PBS WM05 WBS 1.2.3	Liquid Effluents - 200/300 Area	\$ 24,045	\$ 23,883	\$ 21,398	\$ (162)	-1%	\$ 2,485	10%	\$ 26,540	\$ 24,443	
PBS TP02 WBS 1.4.2	WESF	\$ 9,371	\$ 9,364	\$ 9,088	\$ (7)	0%	\$ 276	3%	\$ 10,364	\$ 10,003	
Total		\$ 98,968	\$ 97,987	\$ 90,339	\$ (981)	-1%	\$ 7,648	8%	\$ 109,847	\$ 102,991	

\* Authorized baseline as per the Integrated Planning Accountability, and Budget System (IPABS) – Project Execution Module (PEM).  
Note: Above data includes RL contract for Steam.

## FY TO DATE SCHEDULE / COST PERFORMANCE

The schedule variance is within the thresholds. The favorable cost variance is primarily due to the FY 2000 fee reversal, labor underruns due to involuntary reductions of force and restricted hiring, passbacks, and savings generated from the WMP Program Management Account transfer from indirect to direct in WM03, and labor underruns, reduced sample analyses, passbacks, and a reduced need for crane and rigging support in WM05.

For all active sub-PBSs and TTPs associated with the Operations/Field Office, Fiscal Year to Date (FYTD) Cost and Schedule variances exceeding + / - 10 percent or one million dollars require submission of narratives to explain the variance.

## **Schedule Variance Analysis: (-\$1.0M)**

### **Solid Waste Storage & Disposal — 1.2.1/ WM03**

**Description /Cause:** The unfavorable schedule variance of \$0.2M (1 percent) was within the established threshold.

**Impact:** No Impact.

**Corrective Action:** No corrective action required.

### **Solid Waste Treatment — 1.2.2/ WM04**

**Description /Cause:** The unfavorable schedule variance of \$0.6M (2 percent) was within the established threshold.

**Impact:** No Impact.

**Corrective Action:** No corrective action required.

### **Liquid Effluents — 1.2.3.1/ WM05**

**Description /Cause:** The unfavorable schedule variance of \$0.2M (1 percent) was within the established threshold.

**Impact:** No Impact.

**Corrective Action:** No corrective action required.

### **WESF — 1.4.2/ TP-02**

**Description /Cause:** The unfavorable schedule variance of \$0.0M (0 percent) was within the established threshold.

**Impact:** No Impact.

**Corrective Action:** No corrective action required.

## **Cost Variance Analysis: (+\$7.6M)**

### **Solid Waste Storage and Disposal — 1.2.1/WM03**

**Description and Cause:** The favorable cost variance within WM03 is due to the FY 2000 fee reversal, labor underruns due to involuntary reductions of force and restricted hiring, passbacks, and savings generated from the WMP Program Management Account transfer from indirect to direct.

**Impact:** None.

**Corrective Action:** Underruns have been used to fund the ATG settlement. A favorable yearend variance is forecasted.

### **Solid Waste Treatment — 1.2.2/WM04**

**Description and Cause:** The favorable cost variance within WM04 is due to a contract modification that required payment to ATG upon shipment of waste, rather than the previous agreement of payment on return of waste. The prepayment caused a large variance. Also contributing to the variance is the settlement of claims by ATG.

**Impact:** No impact.

**Corrective Action:** No corrective action required.

### **Liquid Effluents — 1.2.3/WM05**

**Description and Cause:** The favorable cost variance within WM05 is primarily due to labor underruns, reduced sample analyses, passbacks, and a reduced need for crane and rigging support.

**Impact:** None.

**Corrective Action:** Liquid Effluents is forecasting a favorable year-end cost variance.

WESF — 1.4.2/TP02

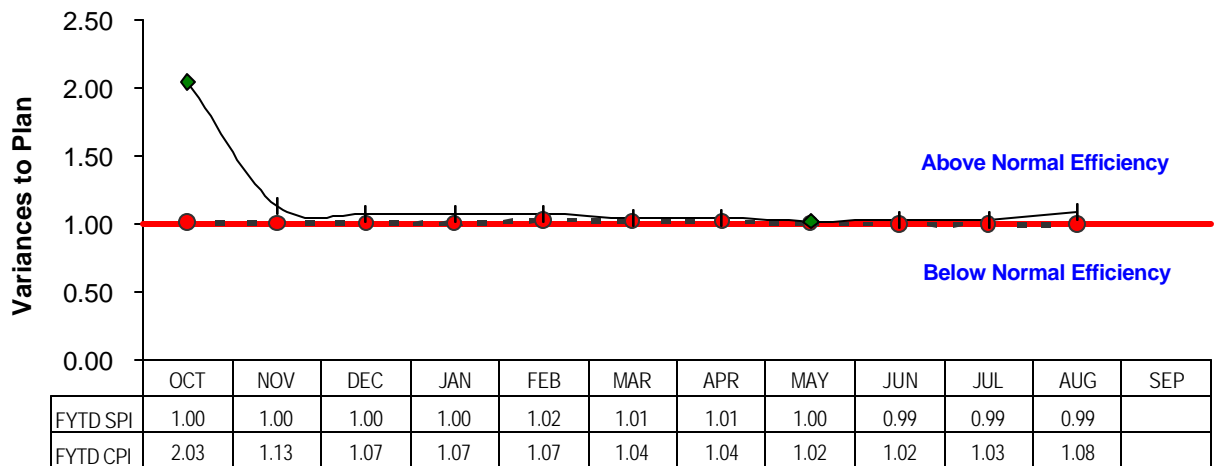
**Description and Cause:** The favorable \$0.3M cost variance within TP02 was within the established threshold.

**Impact:** None.

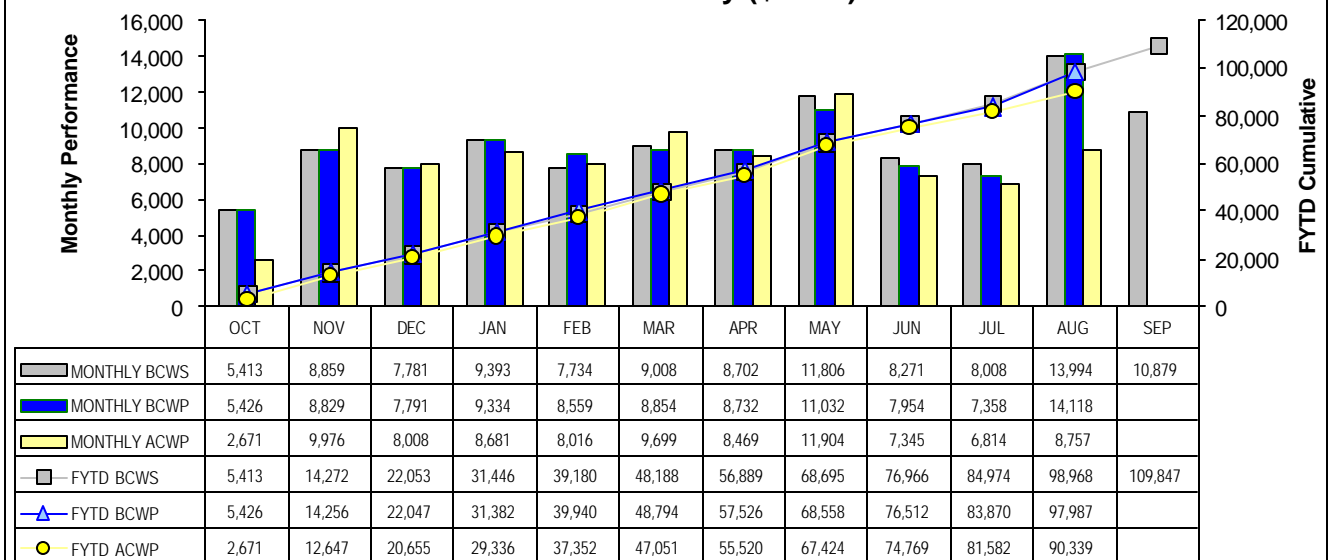
**Corrective Action:** None.

## SCHEDULE / COST PERFORMANCE (MONTHLY AND FYTD)

### Cost/Schedule Performance Indices (FYTD)



### Performance Analysis FYTD and Monthly (\$000s)



## FUNDS MANAGEMENT — FY 2001 TO DATE FUNDS VS SPENDING FORECAST (\$000)

Green

	Expected Funds	FYSF	Variance
<b>1.2 Waste Management</b>			
TP02, WM03-WM05			
Post 2006 - Operating	\$ 98,562	\$ 94,359	4,203
<b>Total</b>	<b>\$ 98,562</b>	<b>\$ 94,359</b>	<b>\$ 4,203</b>

[Status through September 20, 2001]

**NOTE:** Includes 300 Area Liquids and RL costs.

## ISSUES

### Regulatory / Technical / External / DOE Issues

Nothing to report at this time.

### DOE Requests

Continued RL support is requested to complete the RL Operational Readiness Review (ORR) of T Plant Shippingport fuel by November 5, 2001, and to resolve ORR pre-start conditions in a compressed time frame.

## BASLINE CHANGE REQUESTS CURRENTLY IN PROCESS

PROJECT CHANGE NUMBER	DATE ORIGIN.	BCR TITLE	FY01 COST IMPACT \$000	S C H	T E C H	DATE TO CCB	CCB APR'VD	RL APR'VD	CURRENT STATUS
WM-2001-035	9/11/2001	T Plant Containment Building Certification	\$35	X	X	NA	NA	NA	Approved
ADVANCE WORK AUTHORIZATIONS									

## **KEY INTEGRATION ACTIVITIES**

- **SNF Project Support** — Prepare T Plant to receive SNF K-Basin sludge.
- **Liquid Effluents** — Continue support of UP-1 Groundwater treatment at the 200 Area Effluent Treatment Facility.
- **RCP Support** - Continue support to RCP for the removal of waste from the 324 and 327 buildings as well as further waste disposal from demolitions and Accelerated Deactivation Programs.
- **NMS Project Support** – Continue support to the NMS Project for the removal of waste from the PFP.